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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,282	02/22/2006	Kei Sakamoto	050022	7433
23850 7590 10/11/2007 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005			EXAMINER SOLOLA, TAOFIQ A	
			ART UNIT 1625	PAPER NUMBER
			MAIL DATE 10/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,282

Applicant(s)

SAKAMOTO ET AL.

Examiner

Taofiq A. Solola

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: ____ |

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Claims 1-14 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims lack adequate support in the specification. The phraseologies "hydrocarbon group", "chiral secondary hydrocarbon group" and "chiral group" are not defined in the specification so as to ascertain the structures of the compounds that are included and/or excluded by the phrases. They are defined by examples. However, "[e]xemplification is not an explicit definition." The specification must set forth the definition explicitly and clearly, with reasonable clarity, deliberateness and precision, *Teleflex Inc. v. Ficosa North Am Corp.*, 63 USPQ2d 1374, (Fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.*, 60 USPQ2d 1854 (Fed. Cir. 2001). By replacing the phrase with the examples the rejection would be overcome.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The phraseologies "hydrocarbon group", "chiral secondary hydrocarbon group" and "chiral group" are not defined in the claims so as to ascertain the compounds that are included and/or excluded by the phrases. Therefore, it is not possible to determine the metes and bounds of the claims. Hydrocarbon group in of itself embraces the entire textbook of organic chemistry. See the Examiner's suggestion above.

Claim 4 is a duplicate of 1. Both claims are drawn to the same compounds but claim 4 recites the intended use of the compound. Under the US patent practice intended use is not a limitation of a compound or product. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949). By deleting claim 4 the rejection would be overcome.

Claims 6, 9, 12-14 are confusing and therefore indefinite. The claims define R12-R15 as hydrocarbon group while substituting one for the other. In other words the starting reagents and the products are the same. Therefore, they are omnibus claims.

Claims 7-14 fails to set forth how the steps are performed. Under the US patent practice a claim drawn to a process of making must set forth "how" the steps are performed, at least one of which must be novel, not what is done as in the instant. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Feldman et al., *Tetrahed. Lettrs.* (1998), Vol 39(19), pp. 2911-2914.

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Feldman et al., disclose compounds 4, 6a, 6c, and process of making thereof.

Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Leitich et al., Eur. J. Org. Chem. (2001), Vol. 14, pp. 2707-2718.

Leitich et al., disclose compounds 5a-i, and process of making thereof.

Claims 1-4 are rejected under 35 U.S.C. 102(a) as being anticipated by Semmelhack et al., J. Am. Chem. Soc. (1982), Vol. 104(3), pp. 747-759.

Semmelhack et al., disclose compound 19, pp. 748.

Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Morton et al., J. Am. Chem. Soc. (1970), Vol. 92(14), pp. 4349-4257.

Morton et al., disclose compound 36, pp. 4352, and process of making thereof.

Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Daniewski et al., Bull. Polish Acad. Sci.: Chem., (1989), Vol. 37(7-8), pp. 277-281.

Daniewski et al., disclose compounds 10-12, and process of making thereof.

Claims 1-4 are rejected under 35 U.S.C. 102(a) as being anticipated by Daniewski et al., Synthesis, (1987), Vol. 8, pp. 705-708.

Daniewski et al., disclose compounds 9-11, pp. 706.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemeto, Tetrahed. Lettrs. (1994), Vol. 35(42), pp. 7785-7789.

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Applicant claims compounds of formula I, process of making thereof and method of using for resolving diastereomers or alcohols.

Determination of the scope and content of the prior art (MPEP 2141.01)

Nemeto teaches similar compounds, process of making thereof and method of using for resolving diastereomers or alcohols. See compounds 5a-e, schemes 1-3 and paragraphs 1-5.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The difference between the instant invention and that of Nemoto is that applicant proviso out the compounds of Nemoto et al., leaving compounds which are analogous to Nemoto's compounds.

Finding of prima facie obviousness---rational and motivation (MPEP 2142.2413)

However, analogous compounds are prima facie obvious. *In re Henze*, 85 USPQ 261 (1950). The use of analogous starting material in a well-known process is prima facie obvious. *In re Durden*, 226 USPQ 359 (1985). See also *In re Farkas*, 152 USPQ 109 (1966). "Employing a different starting material in a generally old reaction is prima facie obvious. Applicant must show evidence reaction would not be expected to take place or that the new substituent would behave in a manner different from those of the reference." Therefore, the instant invention is prima facie obvious from the teaching of Nemoto. One of ordinary skill in the art would have known to replace substituents of the compounds of Nemoto, make and claim method of using them to resolve diastereomers or alcohols at the time the instant process was made. The motivation is from knowing that analogous compounds would have similar biological and chemical properties.

"When a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result." *United States v. Adams*, 383 U.S. 49, 50-51 (1966). Cited in

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than yield a predictable result." *United States v. Adams*, 383 U.S. 49, 50-51 (1966). Cited in *KSR Int. Co. v. Teleflex Inc.*, 550 U.S. ----, 82 USPQ2d 1385 (2007). The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR*, *ibid*.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.


TAOFIQ SOLOLA
PRIMARY EXAMINER

Group 1625

October 8, 2007